

CLAIMS

1. A sputtering target having a structure where the average crystallite size is 1nm to 50nm.
- 5 2. A sputtering target having a structure where the average crystallite size is 1nm to 5nm.
3. A sputtering target having a structure where the average crystallite size is 1nm to 2nm.
4. The sputtering target according to any one of claims 1 to 3, comprising an
10 alloy having a three-component system or greater.
5. The sputtering target according to any one of claims 1 to 4, containing at least one element selected from among Zr, Pt, Pd, Fe, Co and Cu as its primary component in an atomic ratio of 50at% or more.
6. The sputtering target according to any one of claims 1 to 5, comprising the
15 requirements of a metallic glass satisfying a three-component system, atomic radius difference of 12% or more and negative heat of mixing.
7. The sputtering target according to any one of claims 1 to 6, comprising an alloy having a three-component system or greater with Zr as its primary component, and further containing at least one or more elements selected from among Cu, Ni
20 and Al.
8. The sputtering target according to any one of claims 1 to 6, comprising an alloy having a three-component system or greater with Pt as its primary component, and further containing at least one or more elements selected from among Pd, Cu and P.
- 25 9. The sputtering target according to any one of claims 1 to 6, comprising an alloy having a three-component system or greater with Pd as its primary component, and further containing at least one or more elements selected from among Cu, Ni and P.
10. The sputtering target according to any one of claims 1 to 6, comprising an
30 alloy having a three-component system with Fe as its primary component, and

further containing B and at least one component selected from among Ti, V, Cr, Zr, Nb, Mo, Hf, Ta and W.

11. The sputtering target according to any one of claims 1 to 6, comprising an alloy having a three-component system with Co as its primary component, and
5 further containing at least one or more elements selected from among Fe, Ta and B.

12. The sputtering target according to any one of claims 1 to 6, comprising an alloy having a three-component system with Cu as its primary component, and further containing at least one or more elements selected from between Zr and Ti.

13. A manufacturing method of the sputtering target according to any one of
10 claims 1 to 13, wherein said sputtering target is manufactured by sintering gas atomized powder.